CLAIMS

1.   A transactional computer system comprising a plurality of entities including at least one entity of each of the following forms:

a first entity (Thing entity) having the properties of identifying a client system and uniquely identifying an object in that client system;

a second entity (Proposal entity) for defining a transaction, the second entity being subordinate directly or indirectly to a first entity and having the properties of modelling at least one external agent to carry out a transformation in relation to the first entity; and

a third entity (Decision entity) capable of communicating with a second entity and having the properties of defining the types of decision that may be made, and determining the responses in relation to those decisions.

2.   A computer system according to claim 1, further comprising at least one fourth entity (Assignment entity) subordinate to an associated first entity, the fourth entity having the properties of uniquely identifying the associated first entity, and identifying a particular type of assignment or transformation to be applied to the first entity.

3.   A computer system according to claim 2, in which the fourth entity also identifies a quantity.

4.   A computer system according to claim 1, in which an agent modelled by the second entity includes at least two parties to a transaction.

5.   A computer system according to claim 4, in which the second entity additionally identifies the direction of negotiation between the parties.

6.   A computer system according to claim 1, further
comprising at least one second entity (Subordinate
Proposal entity) which is subordinate to another second
entity, and includes the property of identifying the other
second entity to which it is subordinate.

7.   A computer system according to claim 1, further
comprising a plurality of associated second entities
(Sibling Proposal entities) all of which are directly
subordinate to another second entity and each including
the property of identifying the other second entity to
which they are subordinate whereby the said associated
second entities include quantities which together
correspond to the quantity of the said another second
entity to which they are subordinate.

8.   A computer system according to claim 1, in which the
third entity is multidimensional and contains
multidimensional vectors indicative of values resulting
from an associated second entity.

9.   A computer system according to claim 8, in which at
least one third entity is a partial entity indicating a
partial response from a second entity.

10.   A computer system according to claim 1, further
comprising at least one further entity (Tender entity)
associated with a plurality of second entities and a
single first entity, and identifying at least a quantity.

11.   A computer system according to claim 1, in which the
system does not validate data input into the system.

12.   A computer system according to claim 1, in which the
system provides for at least the following functions:
(i)   creation of a new entity,

(ii)   loading a selected entity or entities into a working memory of the computer system,

(iii) incrementing a multidimensional array,

(iv)   retrieving a value from an entity, and

(v)   advising the client system of an event.

13.   A transactional computer system comprising a plurality of entities including at least one entity of each of the following forms:

a first entity (Thing entity) having the properties of identifying a client system and uniquely identifying an object in that client system;

a second entity (combined Proposal/Assignment entity) for defining a transaction, the second entity being subordinate to a first entity and having the properties of (i) modelling at least one external agent to carry out a transformation in relation to the first entity, and (ii) uniquely identifying the associated first entity, and identifying a particular type of assignment or transformation to be applied to the first entity; and

a third entity (Decision entity) capable of communicating with a second entity and having the properties of defining the types of decision that may be made, and determining the responses in relation to those decisions.

14.   A transactional computer system comprising:

first means defining a first entity (Thing entity) having the properties of identifying a client system and uniquely identifying an object in that client system;

second means defining a second entity (Proposal entity) for defining a transaction, the second entity being subordinate directly or indirectly to a first entity and having the properties of modelling at least one external agent to carry out a transformation in relation to the first entity; and

third means defining a third entity (Decision entity) capable of communicating with means defining a second entity and having the properties of defining the types of decision that may be made, and determining the responses in relation to those decisions.

15. A computer system according to claim 14, further comprising at least one fourth means defining a fourth entity (Assignment entity) subordinate to an associated first entity, the fourth entity having the properties of uniquely identifying the associated first entity, and identifying a particular type of assignment or transformation to be applied to the first entity.

16. A computer system according to claim 15, in which the fourth entity also identifies a quantity.

17. A computer system according to claim 14, in which an agent modelled by means defining the second entity includes at least two parties to a transaction.

18. A computer system according to claim 17, in which the means defining a second entity additionally identifies the direction of negotiation between the parties.

19. A computer system according to claim 14, further comprising at least one means defining a second entity (Subordinate Proposal entity) which is subordinate to another second entity, and includes the property of identifying the other second entity to which it is subordinate.

20. A computer system according to claim 14, further comprising a plurality of means defining associated second entities (Sibling Proposal entities) all of which are directly subordinate to another second entity and each including the property of identifying the other second

entity to which they are subordinate whereby the said associated second entities include quantities which together correspond to the quantity of the said another second entity to which they are subordinate.

21. A computer system according to claim 14, in which the third entity is multidimensional and contains multidimensional vectors indicative of values resulting from an associated second entity.

22. A computer system according to claim 21, in which at least one third entity is a partial entity indicating a partial response from a second entity.

23. A computer system according to claim 14, further comprising at least one means defining a further entity (Tender entity) associated with a plurality of second entities and a single first entity, and identifying at least a quantity.

24. A computer system according to claim 14, in which the system does not validate data input into the system.

25. A computer system according to claim 14, in which the system provides for at least the following functions:
(i)   creation of a new entity,
(ii)   loading a selected entity or entities into a working memory of the computer system,
(iii)   incrementing a multidimensional array,
(iv)   retrieving a value from an entity, and
(v)   advising the client system of an event.

26. A transactional computer system comprising:
        first means defining a first entity (Thing entity) having the properties of identifying a client system and uniquely identifying an object in that client system;

second means defining a second entity (combined Proposal/Assignment entity) for defining a transaction, the second entity being subordinate to a first entity and having the properties of (i) modelling at least one external agent to carry out a transformation in relation to the first entity, and (ii) uniquely identifying the associated first entity, and identifying a particular type of assignment or transformation to be applied to the first entity; and

third means defining a third entity (Decision entity) capable of communicating with measn defining a second entity and having the properties of defining the types of decision that may be made, and determining the responses in relation to those decisions.

27.   A computer system arranged to operate in accordance with a protocol, wherein the protocol causes the computer to generate a plurality of entities including at least one entity of each of the following forms:

a first entity (Thing entity) having the properties of identifying a client system and uniquely identifying an object in that client system;

a second entity (Proposal entity) for defining a transaction, the second entity being subordinate directly or indirectly to a first entity and having the properties of modelling at least one external agent to carry out a transformation in relation to the first entity; and

a third entity (Decision entity) capable of communicating with a second entity and having the properties of defining the types of decision that may be made, and determining the responses in relation to those decisions.

28.   A method of programming a computer, comprising the steps of:

generating a first entity (Thing entity) having the properties of identifying a client system and uniquely identifying an object in that client system;

generating a second entity (Proposal entity) for defining a transaction, the second entity being subordinate directly or indirectly to a first entity and having the properties of modelling at least one external agent to carry out a transformation in relation to the first entity; and

generating a third entity (Decision entity) capable of communicating with a second entity and having the properties of defining the types of decision that may be made, and determining the responses in relation to those decisions.

29.   A computer program product directly loadable into the internal memory of a digital computer, and comprising software code portions for causing the computer to become a computer in accordance with claim 1 when the product is run on a computer.

30.   A computer program product directly loadable into the internal memory of a digital computer, and comprising software code portions for causing the computer to become a computer in accordance with claim 14 when the product is run on a computer.

31.   A computer program product directly loadable into the internal memory of a digital computer, and comprising software code portions for causing the computer to become a computer in accordance with claim 27 when the product is run on a computer.